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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,946	11/30/2001	Taeko Hayase	0445-0313P	3991

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EXAMINER
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COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1794

NOTIFICATION DATE	DELIVERY MODE
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10/14/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 09/996,946	<b>Applicant(s)</b> HAYASE ET AL.	
	<b>Examiner</b> Elizabeth M. Cole	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6-9,11,14,15,18-20 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-9,11,14,15,18-20 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/7/08</u> .  | 6) <input type="checkbox"/> Other: _____                          |

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/28/08 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1, 9, 14-15, 18, 22-25 rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-212866 in view of JP 10-273884 and further in view of Textile Glossary definition of cellulosic fibers. JP '866 discloses an airlaid nonwoven comprising thermoplastic fibers having a length of 3-25 mm, a fineness of 0.5-50 denier and a crimp number of 5-30. The fibers may be conjugate fibers. The fibers are present in an amount of from 3-50%. The airlaid nonwoven further comprises 50-97% of cellulosic fibers. See page 6. The nonwoven may be bonded at the crossover points. See pages 29-30. JP '866 is silent regarding the number of tips of the thermoplastic fibers which are exposed on the surface. However, since JP '866 teaches the same fabric which is made by the same method as the instant fabric and which comprises the same components in the same amounts, it is reasonable to presume that JP '866 would have the same number of tips, since the specification teaches that the tips are provided by forming the material by the particular method and with the particular materials claimed. JP '866 teaches at page 31 that the airlaid nonwoven disclosed by

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JP '866 can be laminated to another layer such as a cellulosic fabric such as wool, silk, linen or cotton, or to a paper layer. These layers correspond to the claimed liquid retentive sheet. JP '866 differs from the claimed invention because JP '866 does not teach incorporating thin fibers into the wipe, (although JP '866 does teach fusion bonding the conjugate fibers at crossover points, which corresponds to the limitation regarding the fusion bonding of the thick fibers). JP '844 teaches an absorptive nonwoven fabric which comprises fiber A and fiber B. The fibers can comprise polyester fibers and can be in the form of sheath/core conjugate fibers. See paragraph 0023. JP '844 teaches that each of fibers A and B can be different deniers and that the particular denier can be chosen in view of the properties which are desired in the finished product. For example, employing a finer fibers such as fibers having a denier of 0.5-6 denier improves the absorptivity of the fabric. The fibers have a length of 3-30mm which encompasses the claimed length. See paragraphs 0026-0027. Therefore, the prior art teaches all the claimed elements. The combination of the known elements by known methods to yield predictable results renders the claimed invention obvious. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated a second fiber having a denier of 0.5-6 in the fabric of JP '866, in view of the teaching of JP '844 that fibers can be mixed in nonwoven wipes and that the properties of the wipe can be changed depending on the denier of the fibers employed. The fiber size of 0.6-5 denier would encompass the claimed fineness of 1-5 dtex. With regard to claim 21, JP '866 teaches 50-97% cellulosic fibers. With regard to claims 22-23, it is noted that JP '866 teaches employing

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cellulosic fibers. As set forth in the attached Textile Glossary, examples of cellulosic fibers are cotton and regenerated cellulose or rayon. Therefore, since JP '866 teaches cellulosic fibers broadly, then the use of any of the particular types of cellulosic fibers would have been obvious to one of ordinary skill in the art.

4. With regard to the amendment to the claims reciting that the second fabric layer is an airlaid layer, JP '866 teaches that the airlaid layer can be combined with a second nonwoven fabric. JP '866 further teaches the airlaid fabrics have improved bulk and hand as compared to carded or wet laid nonwovens. See paragraphs 0003, 0038. Therefore, since airlaid nonwovens are known in the art and are taught by JP '866 as having superior bulk and hand as compared to other types of nonwovens such as wetland or carded nonwovens, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed an airlaid nonwoven as the additional layer to which the nonwoven of JP '866 is bonded, as taught at page 31 of the translation. With regard to the amount of thick and thin fibers, since JP '866 teaches fibers which correspond to the claimed thick fibers and JP '844 teaches mixing fibers having different deniers, such as those corresponding to the claimed thin fibers, in order to arrive at a fabric having the desired properties, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the mixture of thick and thin fibers through the process of routine experimentation in order to arrive at a fabric having the desired properties.

5. With regard to the amendment to claim 1 which recites that the liquid retentive sheet includes heat-fusible fibers having a fineness of 0.5-5 dtex an a length of 2-

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15mm, as set forth above, JP '866 teaches bonding the airlaid nonwoven to another layer such as a cellulosic fabric which corresponds to the claimed liquid retentive sheet. However, JP '866 does not specifically teach that the liquid retentive sheet includes a heat fusible fibers having the claimed fineness and length. JP '884 teaches at paragraph 0028 that a bicomponent fiber having the claimed length and fineness can be mixed with cellulosic fibers, (paragraph 0033) to form a soft, dense and absorbent layer which can be bonded to other layers form a composite fabric, (paragraph 0034). Therefore, it would have been obvious to have incorporated fibers having the claimed fineness and length as taught by JP '884 in the liquid retentive cellulosic fiber layer of JP '885, with the expectation that this would further enhance bonding and produce a soft and absorbent material.

6. Claims 11, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-212866 in view of JP 10-273884 as applied to claims 1, 9-10, 14-15, 18, 22-23 above, and further in view of WO 01/52713 to Kakiuchi et al as set forth in the previous action. With regard to claim 19-20, WO '713 teaches a detergent comprising an electrolyte which is applied to wipes.

7. Claims 3-4, 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 2000-212866 in view of either of JP 10-273884 as applied to claims 1, 9-10, 14-15, 18, 22-23 above, and further in view of Kobayashi et al, EP 926,288 as set forth in the previous action.

8. Applicant's arguments filed 7/28 have been fully considered but are not persuasive.

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Applicant argues that there must a suggestion or motivation to modify the reference.

However, KSR forecloses the argument that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See the recent Board decision *Ex parte Smith*, --USPQ2d--, slip op. at 20, (Be. Pat. App. & Interf. June 25, 2007) (citing KSR, 82 USPQ2d at 1396) (available at

<http://www.uspto.gov/web/offices/dcom/bpai/prec/fd071925.pdf>).

Applicant argues that none of the cited art teaches or provides for the claimed cleaning sheet and does not provide any reason or rationale that would allow one of ordinary skill in the art to arrive at the instant invention as claimed. Or at the advantageous properties that are possessed by the instantly claimed invention.

However, JP '866 sets forth the claimed invention except that it does not teach the particularly claimed fine fibers in the two layers. However, JP '884 teaches that such fine fibers can be combined with other fibers including cellulosic fibers and staple fibers to form absorbent nonwoven fiber layers having improved bonding, softness and absorbency. Further, JP '884 teaches that the claimed fibers were known to be useful in the art of forming absorbent wiping nonwoven fabrics and that they provided softness, porosity and absorbency to such nonwoven fabrics and that they could be incorporated into such fabrics by conventional means and would produce a predictable result.

Further, JP '884 clearly teaches that the fine fibers having the claimed length and fineness are bicomponent fibers. Bicomponent fibers per se are binder fibers which are conventionally used in forming nonwoven fabrics in order to enhance bonding because the fibers can be used to form interfiber bonds without losing their fibrous nature, due to

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the presence of a low melting and a high melting component making up the fiber.

Therefore, since JP '884 teaches bicomponent fibers and that the fibers can be blended with cellulosic fibers to form a nonwoven fabric, the person of ordinary skill in the art would recognize that such fibers would necessarily promote bonding between the fibers of each layer and between the layers themselves.

9. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant argues that JP '866 does not teach an aqueous detergent. However, this feature is found in the Kakiuchi reference as set forth above.

10. All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not



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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

The examiner's supervisor Rena Dye may be reached at (571) 272-3186.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

/Elizabeth M. Cole/  
Primary Examiner, Art Unit 1794

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